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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,962	01/29/2004	Frank Giesel	2694-0142P	2269
2292	7590	02/22/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			TAI, CYRIL	
			ART UNIT	PAPER NUMBER
			1723	
DATE MAILED: 02/22/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/765,962	<b>Applicant(s)</b> GIESEL ET AL.	
	<b>Examiner</b> Cyril Tai	<b>Art Unit</b> 1723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3/1, 4-21 is/are rejected.
- 7) ☒ Claim(s) 2, 3/2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/29/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 103 33 884.5, filed in Germany on July 22, 2003.
2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

3. The disclosure is objected to because of the following informalities: the terms "shreddered" and "shreddering" are not idiomatic English terms. Appropriate correction is required.
4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to **a single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### *Claim Objections*

5. Claim 1 is objected to because of the following informalities: "foils" should be rewritten in the proper plural form "foil", or as "foil layers" as consistent with the applicant's claims and specification (pg. 3, line 32). Appropriate correction is required.

6. Claim 9 is objected to because of the following informalities: "triangles, quadrangles, trapezia" should be rewritten as "triangles, quadrangles or trapezia", as consistent with the applicants' specification (pg. 4, line 36). Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 4-11, 16-18 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claims 1 and 4-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 4-8 recite the term "foil" as part of the apparatus as claimed in claim 1. Since claim 21 depends on claim 1, the use of "synthetic" in claim 21 possibly conflicts with the definition of "foil", both defined below.

"Foil" is defined as a piece of thin and flexible sheet metal (<http://wordnet.princeton.edu>). "Synthetic" is defined as prepared or made artificially (<http://wordnet.princeton.edu>). If the applicants wish to be his/her own lexicographer, "foil" should be defined by the applicants' specification, such as a thin and flexible sheet that consists of recyclable synthetic material, in order for "foil" to be consistent with claim 21.

10. Claims 8-11 recite the limitation "the structured foil" in line 4. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests claim 1 be rewritten to include "a structured foil", or claims 8-11 be rewritten to depend on claims 4, 5 or 6.

11. Claims 16 and 17 recite the limitation "the pressure chamber" in line 4. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests claim 1 be rewritten to include "a pressure chamber", or claims 16 and 17 be rewritten to depend on claim 2. In addition, the examiner suggests that "a stand" in claim 16 be rewritten as "the stand" as it has sufficient antecedent basis.

12. Claim 18 recites the limitations "the level meter" and "the pressure chamber" in line 4. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests that "the level meter" be rewritten as "a level meter", or claim 1 be rewritten to include "a level meter". The examiner suggests claim 18 be rewritten to depend on claim 2, or claim 1 be rewritten to include "a pressure chamber".

13. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 recites that the apparatus consists of recyclable synthetic material. The term "synthetic" is defined as prepared or made artificially, as defined above. Since claim 21 depends on claim 1, the use of "synthetic" in claim 21 possibly conflicts with the definition of the term "foil", as defined above.

The term "metal" is defined as any of several chemical elements that are usually shiny solids that conduct heat or electricity and can be formed into sheets etc.

(<http://wordnet.princeton.edu>). However, a more modern definition of "metal" includes synthetic metals (<http://en.wikipedia.org/wiki/Metal>). Claim 21 presently directs the applicants' invention towards foil made of a synthetic material. Although this is a possible configuration, it is an unusual use of synthetic metal. Therefore, the applicants should clarify whether the invention as claimed in claim 21 is directed towards a foil made of a synthetic metal or a naturally occurring metal.

However, if the applicants' invention as claimed in claim 21 is actually directed towards foil made of a recyclable naturally occurring metal, but the rest of the apparatus as claimed in claim 1 consists of recyclable synthetic material, the applicants should make the appropriate corrections.

### ***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. Claims 1, 3/1, 4-11, 13, 15, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ernryd et al (WO 98/46324) in view of Lee et al (US 5,700,378).

Regarding claim 1, Ernryd et al disclose an apparatus for separating amalgam from dental sewage, consisting of a flow zone and a sedimentation zone (p. 2, lines 8-10) which are arranged in a housing (1) providing an aperture for sewage supply (2) and an aperture for sewage discharge (3), characterized in that the housing, which comprises an inlet chamber (4), a passage chamber (the region between elements (6) and (9) in Fig. 1) containing a separator (10) made of plates (12), and an outlet chamber (the region between plate (17) and outlet (3) in Fig. 1), is sealed in a liquid-proof manner (14, 15, 16), except for a sewage inlet (2) and a sewage outlet (3), and provides stands (stands on the bottom of housing (1) in Fig. 1). Ernryd et al differs from claim 1, where the separator is made of foils.

Lee et al teach a separator (14) having elements (16) formed of foil (40) (col. 3, lines 29-38; col. 5, lines 23-31). Ernryd et al and Lee et al are analogous art in that both teach an apparatus for separating fine particles out of a liquid using sedimentation methods, consisting of a separator.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made in view of the teachings of Lee et al to modify the apparatus of Ernryd et al such that the separator is made of foil in order to make the separator at a lower cost (col. 5, lines 28-29 of Lee et al).

Claim 3/1 adds the further limitation, where the apparatus according to claim 1, characterized in that the inlet chamber, the passage chamber with the separator and the outlet chamber are arranged horizontally one after the other as seen in flow direction, and with the sewage inlet and the sewage outlet arranged in the highest position of the inlet chamber and the outlet chamber respectively. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Ernryd et al teach an apparatus, as discussed above, characterized in that the inlet chamber (4), the passage chamber (the region between elements (6) and (9) in Fig. 1) with the separator (10) and the outlet chamber (the region between plate (17) and outlet (3) in Fig. 1) are arranged horizontally one after the other as seen in flow direction (Fig. 1), and with the sewage inlet (2) and the sewage outlet (3) arranged in the highest position of the inlet chamber and the outlet chamber respectively (Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to horizontally arrange the inlet chamber, the passage chamber with the separator and the outlet chamber one after the other as seen in the flow direction, since it was known in the art that laminar flow promotes settling, in order to streamline, or make laminar, the flow of liquid in the apparatus.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to arrange the sewage inlet and sewage outlet in the highest position of the inlet chamber and the outlet chamber respectively in order to prevent trapped gas in the apparatus, since it was known in the art that gases have a lower density than liquids, such that any air entering the apparatus through the sewage inlet at



the highest position of the inlet chamber remains as close to the top of the housing as possible to prevent interaction with elements of the apparatus which may cause gas to be trapped within the apparatus, and any gas trapped in the apparatus has an opportunity to leave the apparatus at the highest position in the outlet chamber, whereas if the sewage outlet was located in a position below the highest position in the outlet chamber, any void above this position would trap gas.

Claim 4 adds the further limitation, an apparatus according to claim 1, characterized in that the separator is a form body which can be streamed through consisting of several tight fitting layers of a structured foil. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Lee et al teach a separator (14) that is a form body which can be streamed through consisting of several tight fitting layers of a structured foil (Figs. 6b and 6c of Lee et al), which corresponds to an embodiment as shown in Figs. 14 and 15 of the applicants' disclosure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Lee et al to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in that the separator is a form body which can be streamed through consisting of several tight fitting layers of a structured foil in order to efficiently separate difficult-to-separate particles (col. 2, lines 17-18, 39-43; col. 4, lines 66-67; col. 5, line 1 of Lee et al).

Claim 5 adds the further limitation, an apparatus according to claim 1, characterized in that the separator is a form body which can be streamed through consisting of several tight fitting layers of a structured foil and a plain foil that are

arranged alternately. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Lee et al teach a separator (14) that is a form body which can be streamed through consisting of several tight fitting layers of a structured foil and a plain foil that are arranged alternately (Fig. 6d of Lee et al), which corresponds to an embodiment as shown in Fig. 7 of the applicants' disclosure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Lee et al to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in that the separator is a form body which can be streamed through consisting of several tight fitting layers of a structured foil and a plain foil that are arranged alternately in order to efficiently separate difficult-to-separate particles (col. 2, lines 17-18, 39-43; col. 4, lines 66-67; col. 5, line 1 of Lee et al).

Claim 6 adds the further limitation, an apparatus according to claim 1, characterized in that the separator forming a form body consists of a wound structured foil or a structured foil wound in combination with a plain foil. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Lee et al teach a separator (14) forming a form body consisting of a wound structured foil or a structured foil wound in combination with a plain foil (Fig. 6d of Lee et al), which corresponds to an embodiment as shown in Fig. 7 of the applicants' disclosure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Lee et al to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in

that the separator forming a form body consists of a wound structured foil or a structured foil wound in combination with a plain foil in order to efficiently separate difficult-to-separate particles (col. 2, lines 17-18, 39-43; col. 4, lines 66-67; col. 5, line 1 of Lee et al).

Claim 7 adds the further limitation, an apparatus according to claim 1, characterized in that the separator forming a form body consists of tubular elements made of structured foil, or structured foil and plain foil, which are slit into each other. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Lee et al teach a separator (14) forming a form body consists of tubular elements made of structured foil, which are slit into each other (Fig. 6b and 6c of Lee et al).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Lee et al to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in that the separator forming a form body consists of tubular elements made of structured foil, or structured foil and plain foil, which are slit into each other in order to efficiently separate difficult-to-separate particles (col. 2, lines 17-18, 39-43; col. 4, lines 66-67; col. 5, line 1 of Lee et al).

Claim 8 adds the further limitation, an apparatus according to claim 1, characterized in that the structured foil provides continuous longitudinal structures as seen in the flow direction of the sewage. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Lee et al teach a structured foil provides continuous longitudinal structures as seen in the flow direction of the sewage (Figs. 6b,

6c and 6d of Lee et al), which corresponds to an embodiment as shown in Fig. 7 of the applicants' disclosure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Lee et al to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in that the structured foil provides continuous longitudinal structures as seen in the flow direction of the sewage in order to efficiently separate difficult-to-separate particles (col. 2, lines 17-18, 39-43; col. 4, lines 66-67; col. 5, line 1 of Lee et al).

Claim 9 adds the further limitation, an apparatus according to claim 1, characterized in that the structured foil provides a plissé structure consisting of triangles, quadrangles or trapezia. Claim 9 has been interpreted to include the word "or", as discussed above. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Lee et al teach a structured foil provides a plissé structure consisting of triangles, quadrangles or trapezia (Fig. 6b of Lee et al), which corresponds to an embodiment as shown in Fig. 15 of the applicants' disclosure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Lee et al to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in that the structured foil provides a plissé structure consisting of triangles, quadrangles or trapezia in order to efficiently separate difficult-to-separate particles (col. 2, lines 17-18, 39-43; col. 4, lines 66-67; col. 5, line 1 of Lee et al).

Claim 10 adds the further limitation, an apparatus according to claim 1, characterized in that the structured foil provides lamellar, honeycombed or riffle structures or scattered raised points or indentations. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Lee et al teach a structured foil that provides lamellar, honeycombed or riffle structures or scattered raised points or indentations (Fig. 6d of Lee et al), which corresponds to an embodiment as shown in Fig. 13 of the applicants' disclosure.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Lee et al to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in that the structured foil provides lamellar, honeycombed or riffle structures or scattered raised points or indentations in order to efficiently separate difficult-to-separate particles (col. 2, lines 17-18, 39-43; col. 4, lines 66-67; col. 5, line 1 of Lee et al).

Claim 11 adds the further limitation, an apparatus according to claim 1, characterized in that the sedimentation surfaces of the structured foil are roughened. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Ernryd et al teach that the sedimentation surfaces of the structured foil are roughened (pg. 2, lines 18-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Ernryd et al to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in that the sedimentation surfaces of the structured foil are roughened in order to enlarge

the settling surface area and to increase the retention effect of amalgam (pg. 2, lines 18-22 of Ernryd et al).

Claim 13 adds the further limitation, an apparatus according to claim 1, characterized in that the inlet chamber provides a flow guidance element that is arranged in the upper area of the inlet chamber. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Ernryd et al teach that the inlet chamber (4) provides a flow guidance element (5) that is arranged in the upper area of the inlet chamber (Fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Ernryd et al to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in that the inlet chamber provides a flow guidance element that is arranged in the upper area of the inlet chamber in order to delimit the inlet chamber from the passage chamber (pg. 3, lines 31-32 of Ernryd et al).

Claim 15 adds the further limitation, an apparatus according to claim 1, characterized in that the sewage outlet provides a flow regulator. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Ernryd et al teach that a sewage outlet provides a flow regulator (17) (pg. 4, lines 14-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Lee et al to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in

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that the sewage outlet provides a flow regulator in order to assure slow flow through a separator of an apparatus according to claim 1 (pg. 3, lines 15-21 of Ernryd et al).

Claim 19 adds the further limitation, an apparatus according to claim 1, characterized in that the cross-sectional area of the separator is round, oval or square. It would have been obvious to one of ordinary skill in the art at the time of the invention to have made the separator of Ernryd et al and Lee et al, characterized in that the cross-sectional area of the separator is round, oval or square because it has been held to be that the configuration of an invention was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed invention is significant. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Claim 20 adds the further limitation, an apparatus according to claim 1, characterized in that the cross-sectional area of the housing is round, oval or square. It would have been obvious to one of ordinary skill in the art at the time of the invention to have made the housing of Ernryd et al and Lee et al, characterized in that the cross-sectional area of the housing is round, oval or square because it has been held to be that the configuration of an invention was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed invention is significant. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

17. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ernryd et al ('324) and Lee et al ('378) as applied to claim 1 above, and further in view of Holz (US 4,571,298).

Claim 12 adds the further limitation, an apparatus according to claim 1, characterized in that a perforated plate is arranged between the inlet chamber and the passage chamber, the holes of which provide sinkings on the side that faces the flow. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Ernryd et al also teach a perforated plate (6) is arranged between the inlet chamber (4) and the passage chamber (the region between elements (6) and (9) in Fig. 1). Ernryd et al fails to teach holes of the perforated plate provide sinkings on the side that faces the flow. Holz teaches a perforated plate (33), the holes (35) of which provide sinkings (72 a,b) on the side that faces the flow (col. 2, lines 31-43; col. 4, lines 51-59; Figs. 5 and 6). Ernryd et al and Holz are analogous art in that both teach perforated plates to screen out particles.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Holz to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in that a perforated plate is arranged between the inlet chamber and the passage chamber, the holes of which provide sinkings on the side that faces the flow in order to reduce flow resistance (col. 2, lines 31-43 of Holz).



18. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ernryd et al ('324) and Lee et al ('378) as applied to claim 1 above, and further in view of Kopp (US 1,902,171).

Claim 14 adds the further limitation, an apparatus according to claim 1, characterized in that in the uppermost position of the passage chamber, above the separator, a vent channel is arranged which has a connection to the sewage outlet in the outlet chamber. Ernryd et al and Lee et al teach an apparatus according to claim 1, as discussed above. Ernryd et al and Lee et al fail to teach a vent channel. Kopp teaches an apparatus for separating solid substances from sewage, consisting of a flow zone and a sedimentation zone which are arranged in a housing providing an aperture for sewage supply and an aperture for sewage discharge, characterized in that the housing (1), which comprises an inlet chamber (2), a passage chamber (3) containing a separator (12, 13), and an outlet chamber (4), is sealed in a liquid-proof manner (pg. 1, lines 44-45), except for a sewage inlet (14) and a sewage outlet (19), characterized in that in the uppermost position of the passage chamber (3), above the separator (13), a vent channel (18) is arranged which has a connection to the sewage outlet (19) in the outlet chamber (4). Ernryd et al and Lee et al, and Kopp are analogous art in that both teach apparatuses for separating solid substances from sewage.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention in view of the teachings of Kopp to modify the apparatus of Ernryd et al and Lee et al such that the apparatus according to claim 1, characterized in that in the uppermost position of the passage chamber, above the separator, a vent channel is

arranged which has a connection to the sewage outlet in the outlet chamber in order to facilitate the flow of sewage in the event the separator becomes clogged (pg. 2, lines 38-47 of Kopp).

***Allowable Subject Matter***

19. Claims 2 and 3/2 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cyril Tai whose telephone number is (571) 272-1495. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**JOHN KIM**  
*Primary* **PATENT EXAMINER**

CT